AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of administering ondansetron to a mammal comprising spraying the oral mucosa of the mammal with a propellant free buccal spray composition to provide transmucosal absorption of a pharmacologically effective amount of ondansetron through the oral mucosa of the mammal to the systemic circulatory system of the mammal, the composition comprising:

ondansetron or a pharmaceutically acceptable salt thereof in an amount of between 0.001 and 60 percent by weight of the total composition; and

a polar solvent in an amount between 30 and 99.69 percent by weight of the total composition; wherein a ~~therapeutically~~ pharmacologically effective amount of ondansetron is absorbed through the oral mucosa of the mammal to the mammal's systemic circulatory system.

2. (Previously presented) The method of claim 1, further comprising a taste mask and/or flavoring agent in an amount of between 0.1 and 10 percent by weight of the total composition.

3. (Previously presented) The method of claim 2, wherein the polar solvent is present in an amount between 37 and 98.58 percent by weight of the total composition, the ondansetron or a pharmaceutically acceptable salt thereof is present in an amount between 0.005 and 55 percent by weight of the total composition, and the taste mask and/or flavoring agent is present in an amount between 0.5 and 8 percent by weight of the total composition.

4. (Previously presented) The method of claim 3, wherein the polar solvent is present in an amount between 60.9 and 97.06 percent by weight of the total composition, the ondansetron or a pharmaceutically acceptable salt thereof is present in an amount between 0.01 and 40 percent by weight of the total composition, and the taste mask and/or flavoring agent is present in an amount between 0.75 and 7.5 percent by weight of the total composition.

5. (Previously presented) The method of claim 1, wherein the polar solvent is selected from the group consisting of polyethylene glycols having a molecular weight between 400 and 1000, C_2 to C_8 mono- and poly-alcohols, and C_7 to C_{18} alcohols of linear or branched configuration.

6. (Previously presented) The method of claim 1, wherein the polar solvent comprises polyethylene glycol.

7. (Previously presented) The method of claim 1, wherein the polar solvent comprises ethanol.

8. (Previously presented) The method of claim 2, wherein the flavoring agent is selected from the group consisting of synthetic or natural oil of peppermint, oil of spearmint, citrus oil, fruit flavors, sweeteners, and mixtures thereof.

9. (Canceled).

10. (Previously presented) The method of claim 1, wherein the amount of the spray is predetermined.

Claims 11-21 (Canceled).

22. (Currently amended) A method of administering ondansetron to a mammal comprising spraying the oral mucosa of the mammal with a propellant free buccal spray composition to provide transmucosal absorption of a pharmacologically effective amount of ondansetron through the oral mucosa of the mammal to the systemic circulatory system of the mammal, the composition comprising:

ondansetron or a pharmaceutically acceptable salt thereof in an amount between 0.005 and 55 percent by weight of the total composition; and

a non-polar solvent in an amount between 30 and 99.69 percent by weight of the total composition; wherein a ~~therapeutically~~ pharmacologically effective amount of ondansetron is absorbed through the oral mucosa of the mammal to the mammal's systemic circulatory system.

23. (Previously presented) The method of claim 22, further comprising a taste mask and/or flavoring agent in an amount between 0.1 and 10 percent by weight of the total composition.

24. (Previously presented) The method of claim 23, wherein the flavoring agent is selected from the group consisting of synthetic or natural oil of peppermint, oil of spearmint, citrus oil, fruit flavors, sweeteners, and mixtures thereof.

25. (Previously presented) The method of claim 22, wherein the solvent is selected from the group consisting of (C_2-C_{24}) fatty acid (C_2-C_6) esters, C_7-C_{18} hydrocarbons of linear or branched configuration, C_2-C_6 alkanoyl esters, and triglycerides of C_2-C_6 carboxylic acids.

26. (Previously presented) The method of claim 25, wherein the solvent is a triglyceride.

27. (Canceled).

28. (Previously presented) The method of claim 22, wherein the amount of the spray is predetermined.

Claims 29-40 (Canceled).

41. (Currently amended) A method of administering ondansetron to a mammal comprising spraying the oral mucosa of the mammal with a propellant free buccal spray composition to provide transmucosal absorption of a pharmacologically effective amount of ondansetron through the oral mucosa of the mammal to the systemic circulatory system of the mammal, the composition comprising:

ondansetron or a pharmaceutically acceptable salt thereof in an amount of between 0.001 and 60 percent by weight of the total composition; and

a mixture of a polar solvent and a non-polar solvent in an amount of between 30 and 99.69 percent by weight of the total composition, wherein the ratio of the polar solvent to the non-polar solvent ranges from 1:99 to 99:1; wherein a ~~therapeutically~~ pharmacologically effective amount of ondansetron is absorbed through the oral mucosa of the mammal to the mammal's systemic circulatory system.

42. (Previously presented) The method of claim 41, further comprising a taste mask and/or flavoring agent in an amount of between 0.1 and 10 percent by weight of the total composition.

43. (Previously presented) The method of claim 42, wherein the polar solvent is present in an amount between 37 and 98.58 percent by weight of the total composition, the ondansetron or a pharmaceutically acceptable salt thereof is present in an amount between 0.005 and 55 percent by

weight of the total composition, and the taste mask and/or flavoring agent is present in an amount between 0.5 and 8 percent by weight of the total composition.

44. (Previously presented) The method of claim 43, wherein the polar solvent is present in an amount between 60.9 and 97.06 percent by weight of the total composition, the ondansetron or a pharmaceutically acceptable salt thereof is present in an amount between 0.01 and 40 percent by weight of the total composition, and the taste mask and/or flavoring agent is present in an amount between 0.75 and 7.5 percent by weight of the total composition.

45. (Previously presented) The method of claim 41, wherein the polar solvent is selected from the group consisting of polyethylene glycols having a molecular weight between 400 and 1000, C_2 to C_8 mono- and poly-alcohols, and C_7 to C_{18} alcohols of linear or branched configuration and the non-polar solvent is selected from the group consisting of (C_2-C_{24}) fatty acid (C_2-C_6) esters, C_7-C_{18} hydrocarbons of linear or branched configuration, C_2-C_6 alkanoyl esters, and triglycerides of C_2-C_6 carboxylic acids.

46. (Previously presented) The method of claim 42, wherein the flavoring agent is selected from the group consisting of synthetic or natural oil of peppermint, oil of spearmint, citrus oil, fruit flavors, sweeteners, and mixtures thereof.

47. (Canceled).

48. (Previously presented) The method of claim 41, wherein the amount of the spray is predetermined.

Claims 49-56 (Canceled).

57. (Previously presented) The method of claim 1, further comprising treating emesis in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

58. (Original) The method of claim 57, wherein the emesis is caused by chemotherapy or radiation.

59. (Original) The method of claim 58, further comprising administering to the patient a corticosteroid.

60. (Original) The method of claim 58, further comprising administering to the patient dexamethasone.

61. (Original) The method of claim 58, wherein the oral mucosa of the patient is sprayed between about 5 minutes and 2 hours before chemotherapy or radiation therapy begins.

62. (Original) The method of claim 61, further comprising spraying the oral mucosa of the patient between about 1 hour and 6 hours after chemotherapy or radiation therapy ends.

63. (Withdrawn) The method of claim 1, further comprising administering anesthesia to a patient comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray before the anesthesia is administered.

64. (Withdrawn) The method of claim 1, further comprising treating anxiety in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

Claims 65-72 (Canceled).

73. (Previously presented) The method of claim 22, further comprising treating emesis in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

74. (Original) The method of claim 73, wherein the emesis is caused by chemotherapy or radiation.

75. (Original) The method of claim 74, further comprising administering to the patient a corticosteroid.

76. (Original) The method of claim 74, further comprising administering to the patient dexamethasone.

77. (Original) The method of claim 74, wherein the oral mucosa of the patient is sprayed between about 5 minutes and 2 hours before chemotherapy or radiation therapy begins.

78. (Original) The method of claim 77, further comprising spraying the oral mucosa of the patient between about 1 hour and 6 hours after chemotherapy or radiation therapy ends.

79. (Withdrawn) The method of claim 22, further comprising administering anesthesia to a patient comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray before the anesthesia is administered.

80. (Withdrawn) The method of claim 22, further comprising treating anxiety in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

Claims 81-88 (Canceled).

89. (Previously presented) The method of claim 41, further comprising treating emesis in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

90. (Original) The method of claim 89, wherein the emesis is caused by chemotherapy or radiation.

91. (Original) The method of claim 90, further comprising administering to the patient a corticosteroid.

92. (Original) The method of claim 90, further comprising administering to the patient dexamethasone.

93. (Original) The method of claim 90, wherein the oral mucosa of the patient is sprayed between about 5 minutes and 2 hours before chemotherapy or radiation therapy begins.

94. (Original) The method of claim 93, further comprising spraying the oral mucosa of the patient between about 1 hour and 6 hours after chemotherapy or radiation therapy ends.

95. (Withdrawn) The method of claim 41, further comprising administering anesthesia to a patient comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray before the anesthesia is administered.

96. (Withdrawn) The method of claim 41, further comprising treating anxiety in a patient, comprising spraying the oral mucosa of the patient with a therapeutically effective amount of the buccal spray.

Claims 97-104 (Canceled).